

ABSTRACT

A device implemented software system for use with atrial and/or ventricular rate stabilization to adjust DDD/R rate stabilization while maintaining intrinsic ventricular response timing to overdrive the intrinsic sinus (atrial) rate. Specifically, the algorithm is directed toward maintaining ventricular activation/contraction sequence while improving atrial and ventricular hemodynamics. Generally, the PAV interval is prolonged subsequent to a sensed premature beat. In an ultimate embodiment, the algorithm enables extension of the PAV interval subsequent to a non-conducted premature atrial event. The extension of the PAV interval allows for the simultaneous smoothing of the atrial and ventricular rates.

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